

**U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**PRESENTATION TO
THE NUCLEAR WASTE TECHNICAL REVIEW BOARD**

**SUBJECT: QUALITY ASSURANCE
OVERVIEW OF THE
ESF DESIGN PROCESS**

PRESENTER: DONALD G. HORTON

**PRESENTER'S TITLE
AND ORGANIZATION: ACTING DIRECTOR, OFFICE OF QUALITY ASSURANCE
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**PRESENTER'S
TELEPHONE NUMBER: (702) 794-7504**

MARCH 26-27, 1991

OVERVIEW OF PRESENTATION

- **SUMMARY OF OCRWM PROGRAM**
- **RELATION TO OVERVIEW OF PARTICIPANTS' QA PROGRAMS**
- **QA ROLE IN DESIGN PROCESS**

OCRWM QA PROGRAM - A SUMMARY

- **QA ORGANIZATION**
 - VERIFICATIONS, PROGRAM CONTROL,
SITE OVERVIEW
 - DUTIES
- **QA DOCUMENTS - QARD, QAPD, APs
AND QMPs**
- **INTERACTION WITHIN OCRWM**

RELATION TO OVERVIEW OF PARTICIPANTS' QA PROGRAMS

- **REVIEW AND APPROVAL OF QAPDs**
- **AUDITS AND SURVEILLANCES OF ACTIVITIES**
- **MEETINGS OF QA MANAGERS**
- **QA WORKSHOP PARTICIPATION**

QA ROLE IN DESIGN PROCESS

- **AUDITS AND SURVEILLANCES OF DESIGN ACTIVITIES**
- **PARTICIPATION IN DESIGN REVIEW MEETINGS**
- **CLOSE INTERACTION WITH RESPONSIBLE DESIGN ORGANIZATIONS**
- **REVIEW OF DESIGN REQUIREMENTS DOCUMENTS**

**DOE
QA ENHANCEMENT**

WORKSHOPS

PRESENTATION

TO

NWTRB

Dallas, Texas March 27, 1991

AGENDA

INTRODUCTION

Don Horton, YMP
Larry Hayes, USGS

WORKSHOP I

Workshop Process
Short-Term Recommendations
Long-Term Recommendations

Joe Schelling, SNL
Dale Wilder, LLNL
Bill Steinkampf, USGS

WORKSHOP II

Les Shephard, SNL

SUMMARY

Larry Hayes

CLOSE

Larry Hayes / Don Horton

QA WORKSHOPS

AUGUST 1990 WORKSHOP IDENTIFIED FOUR MAJOR ISSUES:

- **SCIENTIFIC/QUALITY ASSURANCE**
 - Lack of flexibility in the application of the QA program during scientific research, acceptability of peer review, further definition of requirements, and procedures commensurate with acceptable (good) scientific practices.
- **COMPUTER SOFTWARE**
 - Computer Software QA program (too complex, does not allow freedom to develop conceptual/prototype design/analysis), excessive documentation during development, lack of flexibility/lengthy change process.

QA WORKSHOPS

FOUR MAJOR ISSUES (Cont'd)

- DATA
 - Its definition, what form, when it is complete and most importantly, time limitation for transfer to the appropriate participants' data archive within 45 days of completion of data acquisition or development.
- COMMUNICATIONS
 - It was apparent that inter-participant/project communications are limited and need improvement.

QA WORKSHOPS

TO DATE, DOE HAS ADDRESSED THE FOLLOWING:

- Scientific issues
- Software QA requirements issues
 - Presentations on Workshop results to OCRWM management by workshop participants.

QA WORKSHOPS SUMMARY

SCIENTIFIC/QA WORKSHOP

- Quality Integration Group has been established and had their first meeting March 4, 1991, in Denver, Colorado.
 - Larry Hayes as Chairman will discuss the details in his presentation.

SUMMARY

SOFTWARE QA WORKSHOP

- Software Quality Advisory Group
 - Draft Charter initiated
 - Request for members initiated
 - Anticipate first meeting March 28, 1991

SUMMARY

QA GRADING WORKSHOP

Success of previous two workshops initiated request for Project to:

- Review QA grading process for improvements
- Have all participants understand the QA grading at all levels
 - Scheduled for April 2-3, 16-19, 1991

SUMMARY

DATA ISSUE

- Surveys completed at USGS, LLNL, SNL, and LANL
- Information being evaluated for necessity of having workshop

COMMUNICATIONS IMPROVEMENT

- Under evaluation